

# Christophe Rosenberger

Full professor  
Computer science

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## Positions

- Since 2007 **Full Professor**, ENSICAEN, GREYC research lab.  
o Teaching in digital identity, biometrics, machine learning, digital forensics,  
o Research in biometrics & digital forensics,
- 2000–2007 **Associate Professor**, INSA Centre Val de Loire, PRISME research lab.
- 1999–2000 **Post-doc**, Ecole Saint Cyr Coetquidan, CREC research lab.
- 1996–1999 **PhD**, ENSSAT, IETR research lab.

## Education

- 2006 **Habilitation in Computer Science**, University of Orleans, France.
- 1996–1999 **PhD in Computer Science**, University of Rennes 1, France.
- 1994–1996 **Master in Computer Science**, University of Rennes 1, France.
- 1991–1993 **Bachelor in Mathematics**, University of Rennes 1, France.

## Awards

- 2023 **Promotion Full professor exceptional second class**.
- 2022 **Best paper award**, CyberWorlds conference in Japan.  
**Asgard++ laureate**, French Embassy in Norway.
- 2019 **Best poster award**, Secrypt conference in Porto.
- 2018 **Best paper award**, CyberWorlds conference in Singapore.  
**Promotion Full professor exceptional first class**.
- 2015 **Best papers in biometrics**, 2 selected among ones published in Elsevier journals.
- 2011 **Asgard laureate**, French Embassy in Norway.  
**Promotion Full professor 1st class**, French government.
- Since 2005 **Excellence National Research grant (PEDR)**, French government.

## Activities

- Responsibility Director of the GREYC lab since 2019 (180 members)  
National Council member of University (Computer science section) since 2018  
Scientific Council member of CNRS (Computer Science Institute) since 2024  
Coordinator of the international committee for the evaluation of the Italian "Cybersecurity" partnership program (2022–2025).  
Chair track "Cybersecurity & Biometrics" at the Cyberworlds conference since 2017  
Guest editor "Special Issue on CyberSecurity & Biometrics for a better Cyberworld" in the Elsevier Future Generation Computer Systems journal in 2019
- Projects Responsible of more than 30 industrial contracts, participants in 10 national and international projects (for a total of 3 millions euros)

Supervision	2 PhD in progress, 25 PhD students, 10 Master students
Committee	69 PhD, 10 faculty members, 11 habilitations
Reviewing	Elsevier Computers & Security, IEEE Transactions on Information Forensics and Security, IET biometrics, ISBA, IJCB, BTAS, ICB, ICISSP, ICPR ...
Publications	1 book, 16 book chapters, 47 international journals, 156 international conferences, 16 invited conferences, 5 national journals, 39 national conferences, 3 patents. H-index 39, 6400 citations

## Bibliography (extract)

### International journals

- [1] Francesco Buccafurri, Gianluca Lax, Denis Migdal, Lorenzo Musarella, and Christophe Rosenberger. Combining trust graphs and keystroke dynamics to counter fake identities in social networks. *Transactions on Emerging Topics in Computing* (ranked Q1 - JCR), 2024.
- [2] Tanguy Gernot and Christophe Rosenberger. Robust biometric scheme against replay attacks using one-time biometric templates. *Elsevier Journal Computers & Security* (ranked Q1 - JCR), 2024.
- [3] Joannes Falade, Sandra Cremer, and Christophe Rosenberger. Digital fingerprint indexing using synthetic binary indexes. *SPRINGER Journal on Pattern Analysis and Applications* (ranked Q2 - JCR), 2024.
- [4] Adrien Dubettier, Tanguy Gernot, Emmanuel Giguet, and Christophe Rosenberger. File type identification tools for digital investigations. *Elsevier Journal Forensic Science International: Digital Investigation* (ranked Q2 - JCR), 2023.
- [5] Yris Brice Wandji Piugie, Christophe Charrier, Joël Di Manno, and Christophe Rosenberger. Deep features fusion for user authentication based on human activity. *IET Biometrics* (ranked Q2 - JCR), 12(4):222–234, 2023.
- [6] Benoit Vibert, Jean-Marie Le Bars, Christophe Charrier, and Christophe Rosenberger. Comparative study of minutiae selection methods for digital fingerprints. *Frontiers in Big Data Data Mining and Management, Special issue on Biometric Data Analysis: Applications and Future Trends in e-Security and e-Health* (ranked Q2 - JCR), 6, 2023.
- [7] Benoit Vibert, Jean-Marie Le Bars, Christophe Charrier, and Christophe Rosenberger. Logical attacks and countermeasures for fingerprint on-card-comparison systems. *Sensors* (ranked Q2 - JCR), 20(18):5410, 2020.
- [8] Kevin Atighehchi, Loubna Ghannam, Morgan Barbier, and Christophe Rosenberger. Greychashing: Combining biometrics and secret for enhancing the security of protected templates. *Elsevier Journal on Future Generation Computer Systems, Special Issue on CyberSecurity & Biometrics for a better Cyberworld* (ranked Q1 - JCR), 2019.
- [9] Paulo Henrique Pisani, Abir Mhenni, Romain Giot, Estelle Cherrier, Norman Poh, André C.P.L.F. de Carvalho, Christophe Rosenberger, and Najoua Essoukri Ben Amara. Adaptive biometric systems: Review and perspectives. *ACM Journal on Computing Surveys* (ranked Q1 - JCR), 2019.
- [10] Denis Migdal and Christophe Rosenberger. Statistical modeling of keystroke dynamics samples for the generation of synthetic datasets. *Elsevier Journal on Future Generation Computer Systems, Special Issue on CyberSecurity & Biometrics for a better Cyberworld* (ranked Q1 - JCR), 2019.
- [11] Abir Mehnni, Estelle Cherrier, Najoua Ben Amara, and Christophe Rosenberger. Double serial adaptation mechanism for keystroke dynamics authentication based on a single password. *Elsevier Journal on Computers & security* (ranked Q1 - JCR), 2019.
- [12] Abir Mehnni, Estelle Cherrier, Najoua Ben Amara, and Christophe Rosenberger. Analysis of doddington zoo classification for user dependent template update: Application to keystroke dynamics recognition. *Elsevier Journal on Future Generation Computer Systems, Special Issue on CyberSecurity & Biometrics for a better Cyberworld* (ranked Q1 - JCR), 2019.
- [13] Aude Plateaux, Patrick Lacharme, Sylvain Vernois, Vincent Coquet, and Christophe Rosenberger. A comparative study of card-not-present e-commerce architectures with card schemes: What about privacy? *Elsevier Journal of information security and applications* (ranked Q2 - JCR), 40:103–110, 2018.

- [14] Zhigang Yao, Jean-Marie Le Bars, Christophe Charrier, and Christophe Rosenberger. Literature review of fingerprint quality assessment and its evaluation. *IET Journal on Biometrics (ranked Q3 - JCR)*, 5(3):243–251, 2016.
- [15] Rima Belguechi, Adel Hafiane, Estelle Cherrier, and Christophe Rosenberger. Comparative study on texture features for fingerprint recognition: application to the biohashing template protection scheme. *Spie Journal of Electronic Imaging (ranked Q3 - JCR)*, 25(1):013033, 2016.
- [16] Romain Giot, Bernadette Dorizzi, and Christophe Rosenberger. A review on the public benchmark databases for static keystroke dynamics. *Elsevier Journal on Computers & Security (ranked Q1 - JCR)*, 55:46–61, 2015.
- [17] Audun Jøsang, Christophe Rosenberger, Laurent Miralabé, Henning Klevjer, Kent A Varmedal, Jérôme Daveau, Knut Eilif Husa, and Petter Taugbøl. Local user-centric identity management. *Springer Journal of trust management*, 2(1):1, 2015.
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- [19] Mohamad El-Abed, Christophe Charrier, and Christophe Rosenberger. Quality assessment of image-based biometric information. *Eurasip Journal on Image and Video Processing (ranked Q2 - JCR)*, 2015(1):3, 2015.
- [20] Syed Zulkarnain Syed Idrus, Estelle Cherrier, Christophe Rosenberger, and Patrick Bours. Soft biometrics for keystroke dynamics: Profiling individuals while typing passwords. *Elsevier Journal on Computers & Security (ranked Q1 - JCR)*, 45:147–155, 2014.
- [21] Rima Belguechi, Estelle Cherrier, Christophe Rosenberger, and Samy Ait-Aoudia. An integrated framework combining bio-hashed minutiae template and pkcs15 compliant card for a better secure management of fingerprint cancelable templates. *Elsevier Journal on computers & security (ranked Q1 - JCR)*, 39:325–339, 2013.
- [22] Romain Giot, Mohamad El-Abed, and Christophe Rosenberger. Fast computation of the performance evaluation of biometric systems: Application to multibiometrics. *Elsevier Journal on Future Generation Computer Systems (ranked Q1 - JCR)*, 29(3):788–799, 2013.
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- [25] Syed Zulkarnain Syed Idrus, Estelle Cherrier, Christophe Rosenberger, and Jean-Jacques Schwartzmann. A review on authentication methods. *Australian Journal of Basic and Applied Sciences (ranked Q4 - JCR)*, 7(5):95–107, 2013.
- [26] Baptiste Hemery, Hélène Laurent, Bruno Emile, and Christophe Rosenberger. Parametrization of an image understanding quality metric with a subjective evaluation. *Elsevier Journal on Pattern Recognition Letters (ranked Q1 - JCR)*, 34(5):511–518, 2013.
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- [30] Rima Belguechi, Patrick Lacharme, and Christophe Rosenberger. Enhancing the privacy of electronic passports. *Inderscience Journal of Information Technology and Management (IJITM) Special Issue on: "Advances and Trends in Biometrics". Dr Lidong Wang (ranked Q4 - JCR)*, 11(1/2):122–137, 2012.

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- [37] Yannick Benezeth, Bruno Emile, Hélène Laurent, and Christophe Rosenberger. Vision-based system for human detection and tracking in indoor environment. *Springer Journal of Social Robotics* (ranked Q2 - JCR), 2(1):41–52, 2010.
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- [45] Cecile Delgorgé, Fabien Courrèges, L Al Bassit, Cyril Novales, Christophe Rosenberger, Natalie Smith-Guerin, Concepció Brù, Rosa Gilabert, Maurizio Vannoni, Gérard Poisson, et al. A tele-operated mobile ultrasound scanner using a light-weight robot. *IEEE Transactions on Information Technology in Biomedicine*, now IEEE Journal of Biomedical and Health Informatics (ranked Q2 - JCR), 9(1):50–58, 2005.
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- [47] Christophe Rosenberger and Kacem Chehdi. Toward a complete adaptive analysis of an image. *Spie Journal of Electronic Imaging* (ranked Q3 - JCR), 12(2):292–299, 2003.

Complete publications list: <http://tinyurl.com/PubCR>